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## RESEARCH

## PAIN IN THE POST-OPERATIVE OF MYOCARDIAL REVASCULARIZATION AND ITS INTER-RELATION WITH THE QUALITY OF LIFE

DOR NO PÓS-OPERATÓRIO DE REVASCULARIZAÇÃO DO MIOCÁRDIO E SUA INTERRELAÇÃO COM A QUALIDADE DE VIDA

DOLOR EN EL POSTOPERATORIO DE REVASCULARIZACIÓN DEL MIOCÁRDIO Y SU INTERRELACIÓN CON LA CALIDAD DE VIDA

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## ABSTRACT

**Objective:** To understand the pain of patients subject to the myocardial revascularization in order to inter-relate this condition with the quality of life. **Method:** Qualitative, descriptive and exploratory, conducted with 10 clients on the third day post-operative myocardial revascularization in a large hospital in the central region of Rio Grande do Sul. **Results:** They emphasize that (05) showed the pain in threshold pain 7, (01) showed threshold 2, and others (04) threshold 9, which are the categories that emerged in the application of visual analogue scale. In addition, five respondents rated the pain as an unpleasant sensation, four patients considerate the pain horrible/terrible and the only one referred to as burnt. **Conclusions:** These categories detected by most users suggest that these signals can interfere considerably in quality of life and restricts them in their daily functions, and can delay your recovery. **Descriptors:** Nursing, Pain, Quality of life.

## RESUMO

**Objetivo:** Compreender a dor de clientes submetidos à revascularização do miocárdio, no intuito de inter-relacionar esta condição com a qualidade de vida. **Método:** Qualitativo, descritivo e exploratório, realizado com 10 clientes no terceiro dia de pós-operatório de revascularização do miocárdio, de um Hospital de grande porte da região central do Rio Grande do Sul. **Resultados:** Evidenciam que (05) entrevistados apresentaram limiar de dor 7, (01) apresentou limiar 2, e outros (04) entrevistados apresentaram limiar 9, sendo estas as categorias que emergiram na aplicação da Escala visual analógica. Além disso, cinco entrevistados classificaram a dor como uma sensação desagradável, outros quatro a consideraram horrível/terrível e apenas um a referiu como ardida. **Conclusões:** Essas categorias detectadas pela maioria dos usuários levam a pensar que esses sinais podem interferir consideravelmente na qualidade de vida, bem como limita-los em suas funções cotidianas, podendo retardar a sua recuperação. **Descritores:** Enfermagem, Dor, Qualidade de vida.

## RESUMEN

**Objetivo:** Comprender el dolor de clientes sometidos a la revascularización del miocardio, con la intuición de relacionar esta condición con la calidad de vida. **Método:** Cualitativo, descriptivo y exploratorio, realizado con 10 clientes en el tercer día de postoperatorio de revascularización del miocardio, de un hospital de gran tenencia de la región central del Rio Grande del Sur. **Resultados:** Evidencian que (05) cuestionados presentaron intensidad de dolor 7, (01) presentó intensidad 2, y otros (04) cuestionados presentaron intensidad 9, siendo estas las categorías que emergieron en la aplicación de la Escala visual analógica. Además, cinco cuestionados clasificaron el dolor como una sensación desagradable, otros cuatro la consideraron horrible/terrible y apenas uno la mencionó como ardida. **Conclusiones:** Esas categorías detectadas por la mayoría de los usuarios llevan a pensar que esas señales pueden intervenir considerablemente en la calidad de vida, como también limitarlos en sus funciones cotidianas, retardando su recuperación. **Descriptor:** Enfermería, Dolor, Calidad de vida.

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## INTRODUCTION

The pain is now known as the fifth vital sign, and defined as an unpleasant sensory and emotional experience. It is related to tissue damage, real or potential, and involves complex physiological mechanisms. This sensation is presented as an interpretation of the physical-chemical noxious stimulus and how this interacts with individual characteristics.<sup>1</sup>

The pain complaint in postoperative coronary artery bypass grafting (CABG) is a common occurrence, and, despite several analgesic medications available for controlling the same, yet it is considered a problem, and feared by the users / customers. In the absence of proper care needs of the user / client it can cause suffering and expose you to unnecessary risks.

The human being seen as systemic, when he underwent heart surgery, may submit amendments to various physiological mechanisms due to contact with various materials and medicines that can cause damage to the body and still generate stress situations.<sup>2</sup> Still, there is the possibility of ecosystem factors demonstrate commitments to interference in their attitudes revealing some form of pain and / or discomfort induced by any of its human dimensions reached.

These factors ecosystem members of the environment in which the user / client is serviced include not only the physical elements that can cause comfort / discomfort, noise / silence, cold / heat, also all part of the arsenal that coronary care units. Included in this space, equipment, medicines, multidisciplinary team and their interrelation with the user / customer. All these aspects can produce fear the unknown, anxiety about the type of surgery that will be submitted, stress and feelings of helplessness to find herself among strangers. The user / client with pain often

experience changes in their lifestyle, which result from the suffering caused by this feeling, with an impact on how he perceives the quality of life (QOL). Thus, pain can interfere negatively on QoL of the individual.<sup>3</sup>

The postoperative pain CRM constitutes a challenge both for the customer and for the health professionals to manage, because it is a complex, multifactorial and subjective (4). Studies show that occurs when the human exposure for prolonged periods to painful stimuli, mostly its consequence is an increase in the rate of postoperative morbidity and mortality.<sup>2</sup> The painful process can cause cardiovascular, immune, gastrointestinal, urinary, respiratory, leading, in most cases, complications arising from shallow breathing, walking late, lack of mobility, among others. Soon, pain control is essential, because this stimulus and cause suffering and complications can expose humans to unnecessary risks.<sup>5</sup>

Because it is an individual experience becomes relevant that the nurse knows how to work with this complaint so humanized and individualized, using their professional knowledge to effective planning of assistance activities.

In this context, the control of pain after cardiac surgery becomes necessary to become effective systemic assistance to customers. Based on professional practice, compete to perform nursing care directly to users / customers in the postoperative period, because it underscores the importance of the team to be able to evaluate the process of pain in order to plan a more efficient care, effective, humane and immediate.

Since postoperative pain influences the recovery of CRM user / customer, you need to rely on an important indicator able to assess the physical, psychological, social and spiritual needs of individuals undergoing myocardial

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revascularization. Its control requires the addition of adequate analgesic treatment assess the individual needs of each user / client, moreover, it is recommended to have a space for listening to improve nursing care provided<sup>(6)</sup>. Thus it is established, through dialogic communication, a relationship of proximity between user / client and professional nurse<sup>7</sup>, and effecting ensuring quality care in the management of postoperative pain CRM.

Pain relief is a prerequisite for the user / client to obtain a quicker recovery which certainly interfere in improving their quality of life. In addition, this relief in conjunction with the promotion of comfort these customers should be a priority, not only for ethical and humane reasons, but the improvement in the state that produces physical, mental and social conditions.<sup>8</sup>

It should be noted that cardiovascular diseases are the leading causes of death nowadays, so the CABG surgery is a widely used, since it has proved a good alternative therapy for heart pathologies inherent.<sup>9-10</sup>

Despite heart surgery techniques have advanced enough, the postoperative pain is a challenge that requires further studies, since, while searching in databases Virtual Library (VHL), using the descriptor pain was detected 63,730 studies related to the theme, and having refined with the descriptor pain after cardiac surgery was found specifically, 13 studies on pain in CABG. These articles that came closer to the theme were 3, which treats pain as the fifth vital sign, the others had as its theme the relationship of pain and analgesia, chronic pain, pain in burn in the elderly, children, and newborns infants, cancer patients, pregnant women and others.

When searching journals in databases that address the Quality of Life-QOL, we found 54,649 studies to refine chose to QOL in post-cardiac surgery. In this refinement found 15 studies, but only 04 on myocardial revascularization, 2 on QOL R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3636-44

and 2 thoracic surgery. Among these stands one on the rehabilitation of patients undergoing CABG, which indicates that this should be initiated during hospitalization and even be extended in the period after discharge to provide the user with better QOL, so has the relationship with this study. Already with the descriptor nursing care met 22,702 related studies, is then refined with nursing care in CABG were captured only 3 work.

Of the studies surveyed showed a gap that highlights the lack of research with the user / client who is undergoing CABG to recognize pain as important signal that directly interferes with recovery and consequently on their QOL. Thus, this study reveals a genuine importance in regard to their contribution to the production of knowledge related to the theme pain and quality of life in postoperative myocardial revascularization, offering material for measuring pain, sensitizing staff to provide appropriate assistance, humanized and individualized by assessing signal that specifies which studies have cited as the fifth vital sign and a challenge for nursing. So, the question is: what is the intensity of pain in the view of users / clients undergoing CABG and the influence of this phenomenon with the quality of life? And, what is the concept and pain for the user / client?

This study is justified by the importance that represents the pain postoperatively of myocardial revascularization, its relationship with the user's QoL beyond the scarce about this particular subject. The nursing staff to assess pain on the client is able to provide a more qualified and systemic enables them to better QoL, whereas the painful experience is unique, personal, nontransferable, but may be detected by instruments themselves and minimized using procedures.

It is considered the nurse member of the surgical team, which plays an important job to

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ensure QV user / client undergoing CABG. Accordingly the management of postoperative pain by this professional provides improvement in their QOL enabling health promotion.

Corroborating this approach and achievement of this research, is listed out the following objective: understand the pain of users / clients undergoing CABG in order to interrelate it with the quality of life.

## METHODOLOGY

This is a study with a qualitative, descriptive and exploratory, conducted with 10 clients on the third day postoperative myocardial revascularization.

It was developed in a large hospital in a city in the central region of Rio Grande do Sul, specifically in an intensive coronary care unit and cardiology at the hospital. The present study evaluated the clients who were in the third day after surgery and who had medical conditions respond to interview. It was used as an exclusion criterion, clients unable to be interviewed.

Data collection was performed using a semi-structured interview that included five questions, including the visual analogue scale - VAS. In this study, the data refer to the EVA application and interview an open question: what is grief to you? It is noteworthy that the application of the visual analogue scale - VAS aim was to describe the pain in the view of users / clients undergoing CABG and questioning to know the meaning of pain for each subject.

The data that emerged through the VAS scale and questioning proposed were categorized and analyzed following the proposed Minayo by pre-analysis, material exploration, processing and interpretation of results.<sup>11</sup>

Please note that the Visual Analogue Scale (VAS) consists of a horizontal line with ten centimeters numbered from zero to ten faces and

classification of pain intensity, where the far left is the indication without pain (zero) and a face of happiness and the right, pain (10) and with a face full of sadness. At the time of the interview was made available to each subject an EVA printed in colorful and requested that it registrasse the intensity of their pain.

The EVA can be used in all age groups and its flexibility makes it easy to approach the topic, and gives the response data with the user / customer.

The instruments to measure pain can be one-dimensional or multidimensional, this study used only the EVA, which is a simple, sensitive and reproducible, allowing continuous analysis of pain.<sup>12</sup>

The data analysis was grounded in the light of studies on the subject. For the development of this research were observed ethical and legal guidelines contained in Resolution 196/96 of the Ministry of Health, which sets guidelines and standards for research with human subjects.<sup>13</sup> The study was conducted after approval by the CEP / UNIFRA with registration number 235.2009.2 and CONEP with registration number 1246.

## DISCUSSION AND RESULTS

Most coronary heart disease are solved by means of CRM Furthermore, this type of surgery is increasingly able to improvement of QOL and this fact becomes decisive for surgical.<sup>14</sup>

The ten subjects in this study were between 49 and 70 years, three females and seven males. Nine respondents were retired, and only one was active.

In assessing the participants' pain threshold results were that 05 of the respondents had a pain threshold 7, scale and only 01 of the participants reported note equal to 2 by the scale

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which characterizes a moderate soreness, and 04 of the respondents had Note 9 which is a strong sensation of pain and these categories that have emerged through the application of EVA.

From the above it is considered the need for a careful and systemic unique to each user / client RM post, since pain is subjective and when left untreated can predispose individuals to other complications. Therefore, the study shows that it is possible to assess the intensity of pain user / client using tools already tested and validated to understand the pain threshold of each and, from that understanding to discuss and articulate appropriate therapies to stabilize this discomfort, which is cited in studies as the fifth vital sign.

Health has many dimensions, resulting from the complex interaction between physical, psychological, social and spiritual human being.<sup>15</sup> Thus the critical role nursing has with these users / customers, as it has vital role in maintaining and promoting health and quality of life of these. However it is essential to be aware that the space / environment and their inter-relatable elements interact and influence each other. Therefore, the phenomena pain and quality of life experienced postoperative more specifically cardiac surgery are connected by dependencies and influences of elements of the space.<sup>16</sup>

Besides the application of EVA is questioned each subject about pain wondering what pain is for you? Most subjects (05) classified it as unpleasant sensation, four (04) of them considered the awful / terrible and only one referred to as burnt.

For the answers you realize that pain is a sensation itself, nontransferable and each personal being who suffers it. The same surgical procedure can cause from mild discomfort for some, while for others it can be desolante fashion sense, horrible, atrocious and may be considered intolerable. These peculiarities regarding pain confirms that each human being is unique, R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3636-44

different from others, irreplaceable and you think, feel, and act in their own way. As the pain threshold that depends on which presents for each. The painful experience can lead to anguish, despair and sense of urgency to solve it and which form part of certain painful experiences.

It takes into account many factors that influence how the pain feels like, for example, memory, emotion, social and economic conditions, vital signs, coping strategies thereof, among other aspects. Precisely because it is a sensation that requires a variety of domains, their assessment and understanding becomes fundamentally complex (17), so once interrelates, interdepende, and has influenced the factors that together form the entire considered space. Soon, the pain interferes with balance / dynamic QOL user / customer. However, claiming to be the pain the most frequent complaint among customers in the postoperative period, which makes their control a challenge for nursing staff.<sup>18</sup>

Pain control as a challenge for nursing staff requires the development of new behaviors to be created and innovated from the assessment ecosystem, which by its scope dimensional human being there is the possibility to understand the areas that are committed to and capable of causing painful stimuli. An improvement in QOL human undergoing myocardial revascularization can be achieved through appropriate procedures to minimize their pain postoperatively. Therefore, it is the nursing staff assess, understand, recognize type and intensity of pain in the postoperative period to treat it according to the need of each individual (18). This painful process to be known by scales, in this study the EVA. However, understanding the type and intensity of the pain is just the starting point to provide the user with better QOL, we need to find for each of the appropriate procedure that may contribute to the pain relief they are experiencing. In the ecosystem approach is necessary to find the

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human dimension that is compromised in triggering the pain. From this review it is possible to find the appropriate strategy to interfere with pain discomfort.

In this context, it is known that the pain may be due to the physiological state, psychological, social, or spiritual, but also influenced by the environment in which it is inserted. A pain when untreated predisposes the user / customer to a stressful situation that can be handled by not stepping up postoperatively. Pain is an experience characterized by subjectivity and multidimensionality of the human being, his understanding is extremely relevant in aid of choice of therapy and or to verify the effectiveness of this choice.<sup>19</sup>

QOL is subjective and multidimensional because it presents several meanings, which reflect the knowledge, experience and values experienced individually and collectively, reflecting stories of life of every human being. The sensation of pain is subjective and multidimensional, as amended, and may be caused by factors perspectives, cognitive, emotional and behavioral, such as fear, anger, attitudes and other factors (20-21). Therefore, they are phenomena that are interrelated, since the relief of pain of attributes enables an improvement of QOL.

In the meantime, a review / proper understanding and use of appropriate tools will intervene effectively in pain, allowing the welfare and improvement of QOL of individuals who suffer from this painful sensation. The nurse as manager of nursing care and for being a dynamic professional needs to know the various ways to assess and understand the pain must seek to interact with the team, so to speak and discuss with interrelated actions towards the optimization of a systemic assistance users / clients, thus providing opportunities for a better QoL. The use of scales to assess and understand the pain and R. pesq.: cuid. fundam. online 2013. abr./jun. 5(2):3636-44

from that knowledge make the choice of the most appropriate procedures to minimize it certainly leads to decrease the time that the user is hostage this unpleasant feeling, and terrifying desolante. It is noticed that the pain user needs to be evaluated and understood, through mechanisms that currently are available and which are instruments that can decrease pain and increase the period faster QOL.

## CONCLUSION

The soreness can be evaluated and understood through various instruments, but in this study only used the EVA. Other instruments can be used, but indicates that its use should serve as motivation for a systematic assistance in control and pain relief in search of a better QOL.

In this research came the pain in most users, as unpleasant sensation, others felt awful / terrible and only one referred to as stinging sensation. These categories detected by most users suggest that these signals may interfere considerably in the quality of life of users / customers as well as the individual limit of its daily functions and may delay your recovery.

Recognizing pain as a fifth vital sign can help to create nursing means to systematically evaluate and understand the pain to try and stabilize relief, thereby helping to improve the QOL of patients undergoing coronary artery bypass grafting. In this sense, to try to understand the pain intensity of these users, this study provided an approach to the customer. Thus, it was possible to give a sense humanized nursing care for pain assessment in seeking care and systemic inter-related singular, since the result of the survey revealed that signal intensity and appears differently to each individual and subjective way.

Understanding the pain arises as a possibility for nursing care implement systemic to the individual who experiences this experience,

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because although the pain is part of the everyday lives of those who have heart surgery, there is still a gap to be filled in this perspective. In health care stands related to the client's welfare in his general condition, considering the surgical experience, coupled with the limitations generated by analyzing pain in the ecosystem approach.

Therefore we emphasize the need for understanding of pain in nursing care by developing the capacity of nurses to systematic understanding in practice. Points out that it is necessary to deepen the knowledge in relation to this issue as the pain in users / clients post-CABG manifests itself in an intense and unpleasant. We must acknowledge the painful process scientifically to set procedures in place that mitigate the negative effects.

It is emphasized that nursing be relevant provide a care enabling conditions that can enhance the quality of life of the user / client, but for that we must institute a systematization of care that ensure scientific validity of the recognition of pain user / customer and establishing appropriate procedures individuality and uniqueness of every human being. It is in this way that nursing care can tailor a systemic leveraging the construction of care strategies according to the demands of the user / customer postoperative myocardial revascularization.

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